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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/883,123	06/15/2001	Licheng Zeng	WDUMR-022US	8259

7590

10/04/2005

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EXAMINER

ALAUBAIDI, HAYTHIM J

ART UNIT	PAPER NUMBER
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2161

DATE MAILED: 10/04/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary

Application No.

09/883,123

Applicant(s)

ZENG, LICHENG

Examiner

Haythim J. Alaubaidi

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 June 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12,21,35,36 and 39-42 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12,21,35,36,39,40 and 42 is/are rejected.
- 7) ☒ Claim(s) 41 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 June 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☒ Certified copies of the priority documents have been received in Application No. 09/883,123.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

DETAILED ACTION

1. This communication is a Final Office Action in response to the Amendment filed on June 17, 2005.
2. Claims 1-12, 21, 35-36 and 39-42 are presented for examination, of which Claim 1 is the only Independent Claim.
3. The Examiner acknowledges the amendment to Claim 1, to overcome the 101 and 112 rejections. Hence, all prior 101 and 112 rejections are hereby withdrawn.
4. Claims 1-12, 21, 35-36, 39-40 and 42, are rejected under 35 U.S.C. 103(a).
5. Claim 41 is objected to as being dependent upon a rejected base claim.

Priority

6. Applicant's claim for foreign priority under 35 U.S.C. §119(a)–(d) is acknowledged, the Applicant was accorded the benefit of the earlier filing date of May 18, 2001.

Response to Arguments

7. Applicant's arguments with respect to claims 1-12, 21, 35-36 and 39-42 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 112

8. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

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9. Claim 40, is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The term "any" is rendering the claim indefinite. Appropriate correction is required.

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. Claims 1-12, 21, 35-36, 39-40 and 42, are rejected under 35 U.S.C. 103(a) as being unpatentable over Eli Abir (U.S. Patent Application Publication No. 2004/0122656 that is claiming priority of provisional application 60/276,107 and Abir hereinafter) in view of Greg Hetherington (U.S. Patent No. 6,272,495 and Hetherington hereinafter).

Regarding Claims 1 and 42, Abir (Provisional Application 60/276,107) discloses:
processing in incremental manner (please see Page 5, Paragraphs 3 and 4),
comprises multiple parsing steps (please see Pages 4-6 and Applicant's arguments stated in the amendment of June 17, 2005, Page 7, Last complete paragraph)

Abir's reference discloses all of the claimed subject matter set forth above, except it does not explicitly indicate parsing unstructured data nor does it teaches an inference engine. However, Hetherington discloses parsing unstructured data (free-format text) (Col 2, Lines 18-27; see also Col 6, Lines 20-21) and also teaches inference engine (Col 16, Lines 29-34; see also Col 16, Line 61 through Col 17, Line 7).

Given the intended broad application of the Abir's system, It would have been obvious to a person of ordinary skill in the art at the time of Applicant's invention to modify the teachings of Abir with the teachings of Hetherington to include parsing unstructured data and using an inference engine with a motivation that would enable the performance to analyze the data in order to increase the efficiency of such a system by no being limited to structured data only, but unstructured data also through the use of an inference engine.

Regarding Claims 2 and 21, Abir discloses multiple parsing steps (Paragraphs [0121] through [0123] and [0225] consulting an inference engine (Figure No. 3, Element, No. 302, 304 and/or 308).

Regarding Claim 3, Hetherington discloses knowledge base (Col 1, Lines 16-24; see also Col 1, Lines 31-38; see also Col 14, Lines 10-20) analyzing data at on or more predefined level of analysis (Col 13, Line 66 though Col 14, Line 21).

Regarding Claim 4, Hetherington discloses lexical level (Col 22, Lines 10-18).

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Regarding Claim 5, Hetherington discloses orthographic level (Col 2, Lines 18-27; see also Col 28, Lines 35-43, i.e. spelling)¹.

Regarding Claim 6, Hetherington discloses semantic level (Col 10, Lines 24-33).

Regarding Claim 7, Hetherington discloses contextual level (Col 12, Lines 37-49).

Regarding Claim 8, Abir discloses linguistic theory (Abir, Paragraph [0039]).

Regarding Claims 9 and 10, Abir discloses linguistic theory is that of systematic functional linguistic (Abir, Paragraph [0039], i.e. *linguistic theory, which focuses on the semantic value of individual words in the context of other individual words*).

Regarding Claims 11-12 and 35-36 Hetherington discloses attribute data wherein attribute data is name and address (Col 5, Line 64 through Col 6, Line 19; see also Col 7, Lines 33-40; and see also figures 2, 3, 4, 6 and 8-11 and corresponding text).

Regarding Claims 39-40, Abir (provisional application 60/276,107) discloses analyzing data at said one more predefined levels (please see provisional application 60/276,107, Page 5, 3rd paragraph and Page 6, 3rd paragraph); please also see Hetherington (Col 22, Lines 10-18; see also Col 2, Lines 18-27; see also Col 28, Lines 35-43; see also Col 10, Lines 24-33).

¹ Please note that the Examiner is interpreting the "orthographic" according to the Specification of the

Allowable Subject Matter

12. Claim 41 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

13. The following is the Examiner's statement of reasons for the indication of allowable subject matter:

Regarding Claim 41 Applicant's particular system in for parsing unstructured data is the combination of wherein the knowledge representation language contains a knowledge representation layer, a knowledge base management layer, a language inference layer and a language programming interface layer, which together enable the building of a body of executable knowledge about the semantic structures and lexico-grammatical patterns for name and address data in a selected language in combination with the other limitations of the claims, was not disclosed by, would not have been obvious over, nor would have been fairly suggested by the prior art of record or that encountered in searching of the prior art, the prior art fails to anticipate or render Applicant's limitations above obvious.

14. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

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§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Points of Contact

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Haythim J. Alaubaidi whose telephone number is (571) 272-4014. The examiner can normally be reached on Monday - Friday from 8:00 AM to 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Safet Metjahic, can be reached on (571) 272-4023.

Any response to this office action should be mailed to:

The Commissioner of Patents and Trademarks, Washington, D.C. 20231 or Faxed at our central fax number (571) 273-8300.

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Hand-delivered responses should be brought to the Customer Service Window of the
Randolph Building at 401 Dulany Street, Alexandria, VA 22314

A handwritten signature in black ink, appearing to read "Hayth", is written above a horizontal line.

Patent Examiner
Technology Center 2100
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A handwritten signature in black ink, appearing to read "Frantz Coby", is written above the printed name.

FRANTZ COBY
PRIMARY EXAMINER